

What is claimed is:

1. A method of manufacturing a non-volatile semiconductor memory device, comprising the steps of:
 - (a) preparing a semiconductor substrate;
 - 5 (b) forming a plurality of gate structures on said semiconductor substrate, each of said plurality of gate structures including a multi-layer structure having a first insulation film, a floating gate electrode, a second insulation film and a control gate electrode stacked in the order named, said plurality of gate structures including first and second gate structures formed in first and second non-volatile memory cell regions, respectively;
 - 10 (c) forming a first drain region in said first non-volatile memory cell region under a first drain formation condition by using said first gate structure as a mask;
 - (d) forming a second drain region in said second non-volatile memory cell region under a second drain formation condition by using said second gate structure as a mask;
 - 15 (e) forming a first source region in said first non-volatile memory cell region under a first source formation condition by using said first gate structure as a mask, said first gate structure, said first drain region and said first source region constituting a first memory cell transistor having a first operating characteristic; and
 - (f) forming a second source region in said second non-volatile memory cell region under a second source formation condition by using said second gate structure as a mask, said second gate structure, said second drain region and said second source region constituting a second memory cell transistor having a second operating characteristic.
- 20 25 2. The method according to claim 1, wherein:

said first memory cell transistor includes NOR-type memory cell transistor and said second memory cell transistor includes a DINOR-type memory cell transistor; and

5 said first and second drain formation conditions include conditions different from each other.

3. The method according to claim 2, where:

 said first and second drain formation conditions includes a partially common formation condition at least partially common to said first and second drain formation conditions.

10 4. The method according to claim 2, wherein:

 said first and second source formation conditions includes the same condition.